



# Preservation Strategies: Intro to the OAIS Reference Model

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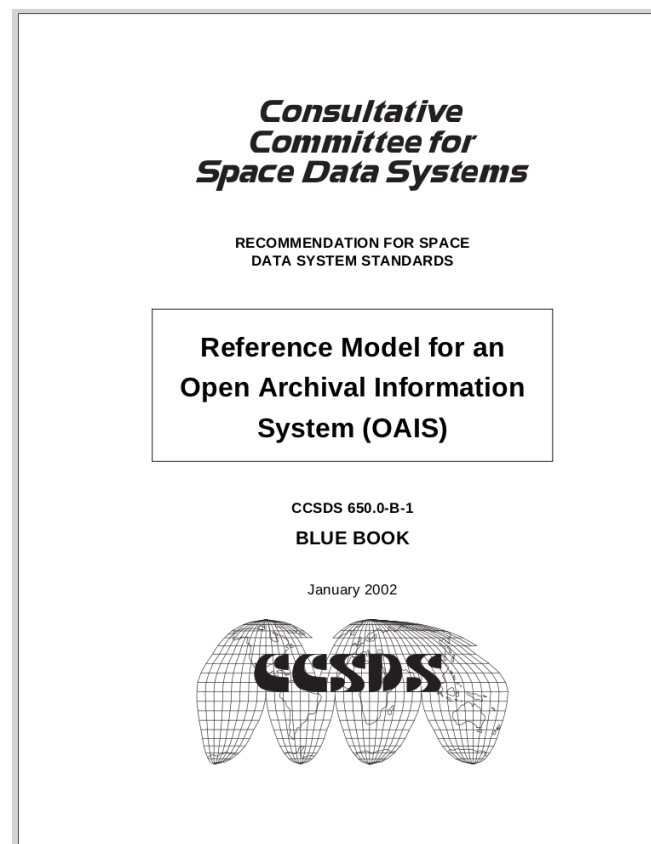




# Overview

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- The Reference Model for an Open Archival Information System (OAIS) provides a framework of concepts and terminology for describing the architecture of archives intended for long term preservation of digital information.
- This course model provides a ***brief*** introduction.





# Relevance to Data Management

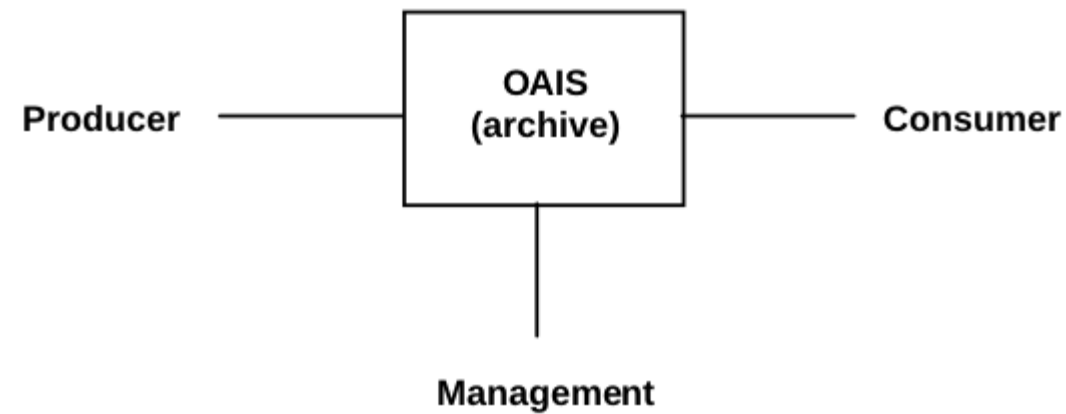
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- Archives intended for long term preservation have many common requirements, some which may not be immediately obvious. The OAIS-RM gives a good common understanding of those shared requirements.
- The OAIS-RM also provides a generic high level architecture that depicts an approach to accomplishing those requirements.
- Your system should have analogous components that can map to the RM concepts. The RM terminology is widely used to describe the purpose and use of those components.

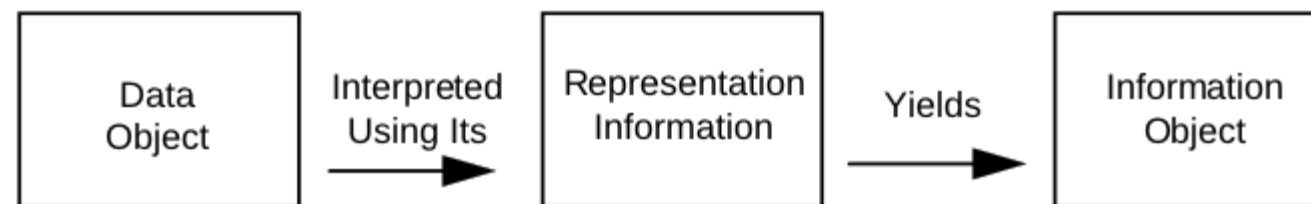


# OAIS overview

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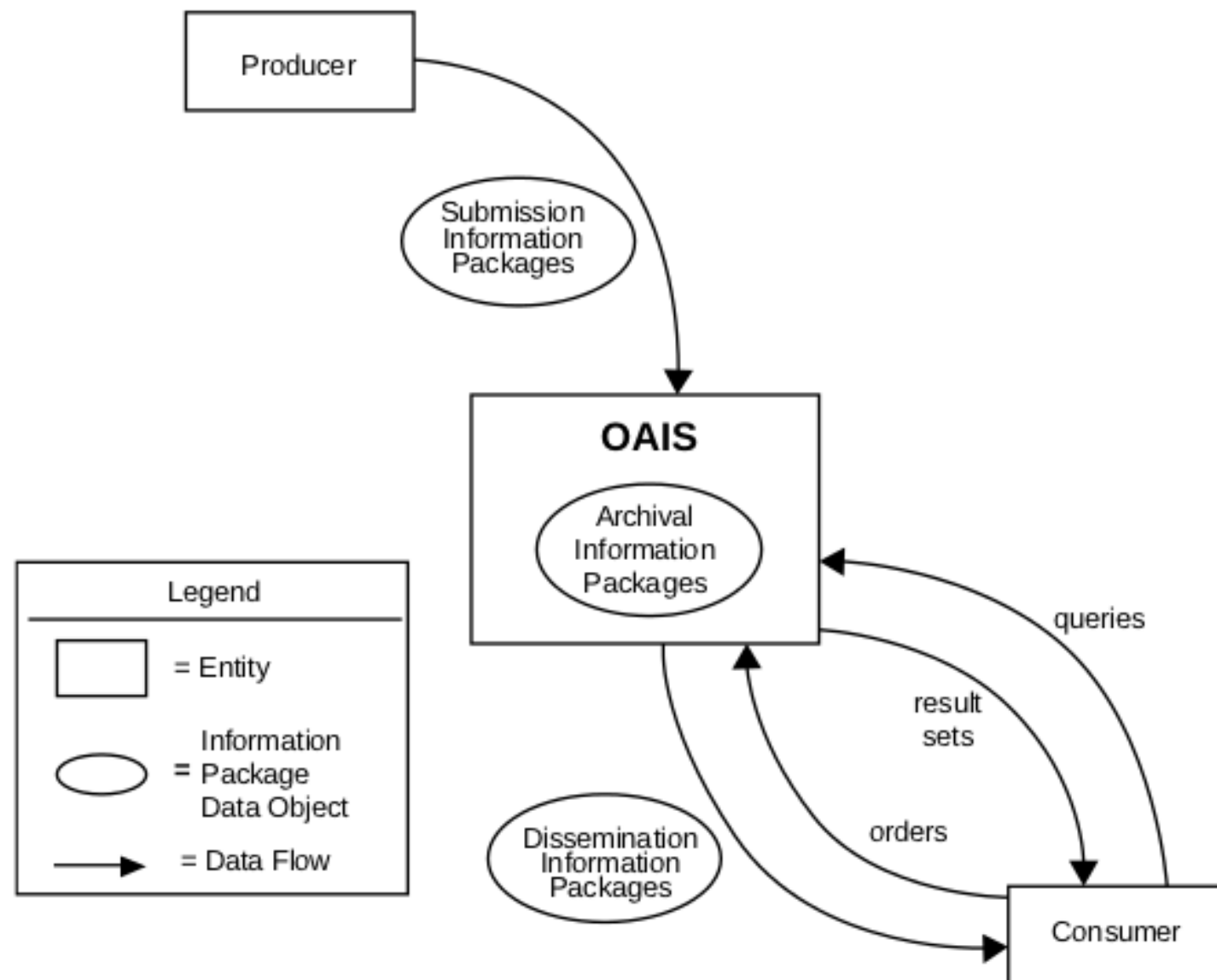


**Figure 2-1: Environment Model of an OAIS**



**Figure 2-2: Obtaining Information from Data**

# OAIS External data flow

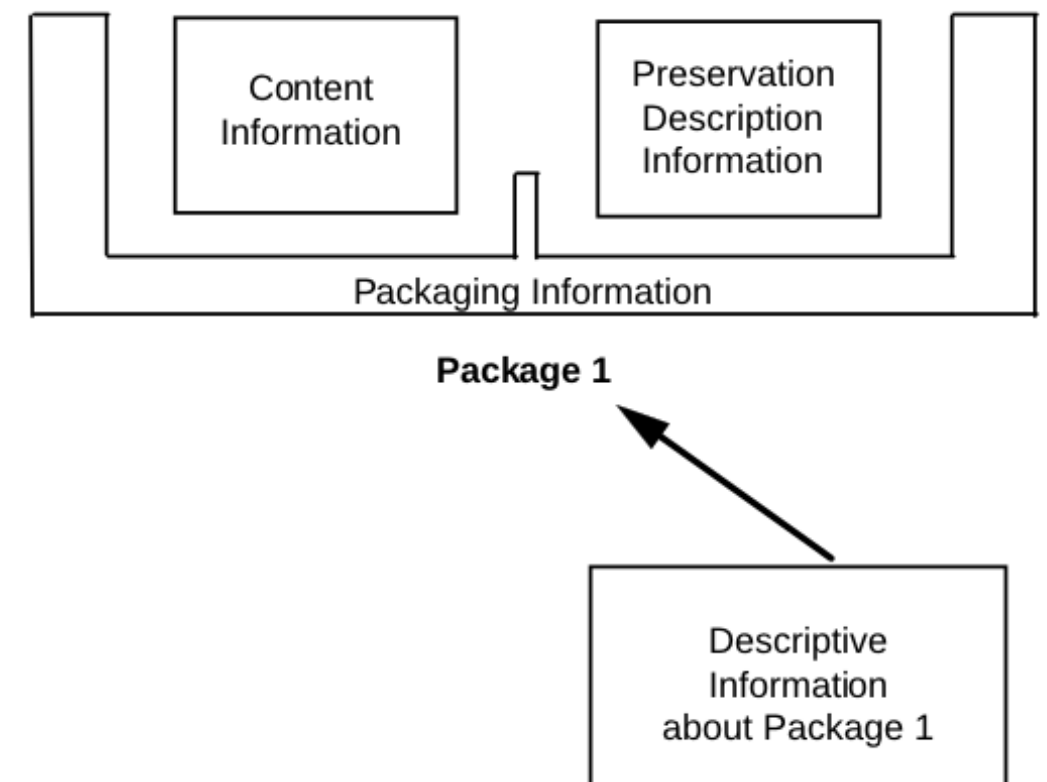


**Figure 2-4: OAIS Archive External Data**



# Information Packaging

- Preservation Description Information:
  - Provenance – Source of Content; Who had custody; History
  - Context – How the Content relates to external information.
  - Reference – Identifiers for the Content
  - Fixity – Protection from alteration or corruption, such as Checksum or Digital Signature



**Figure 2-3: Information Package Concepts and Relationships**



# OAIS Functional Entities

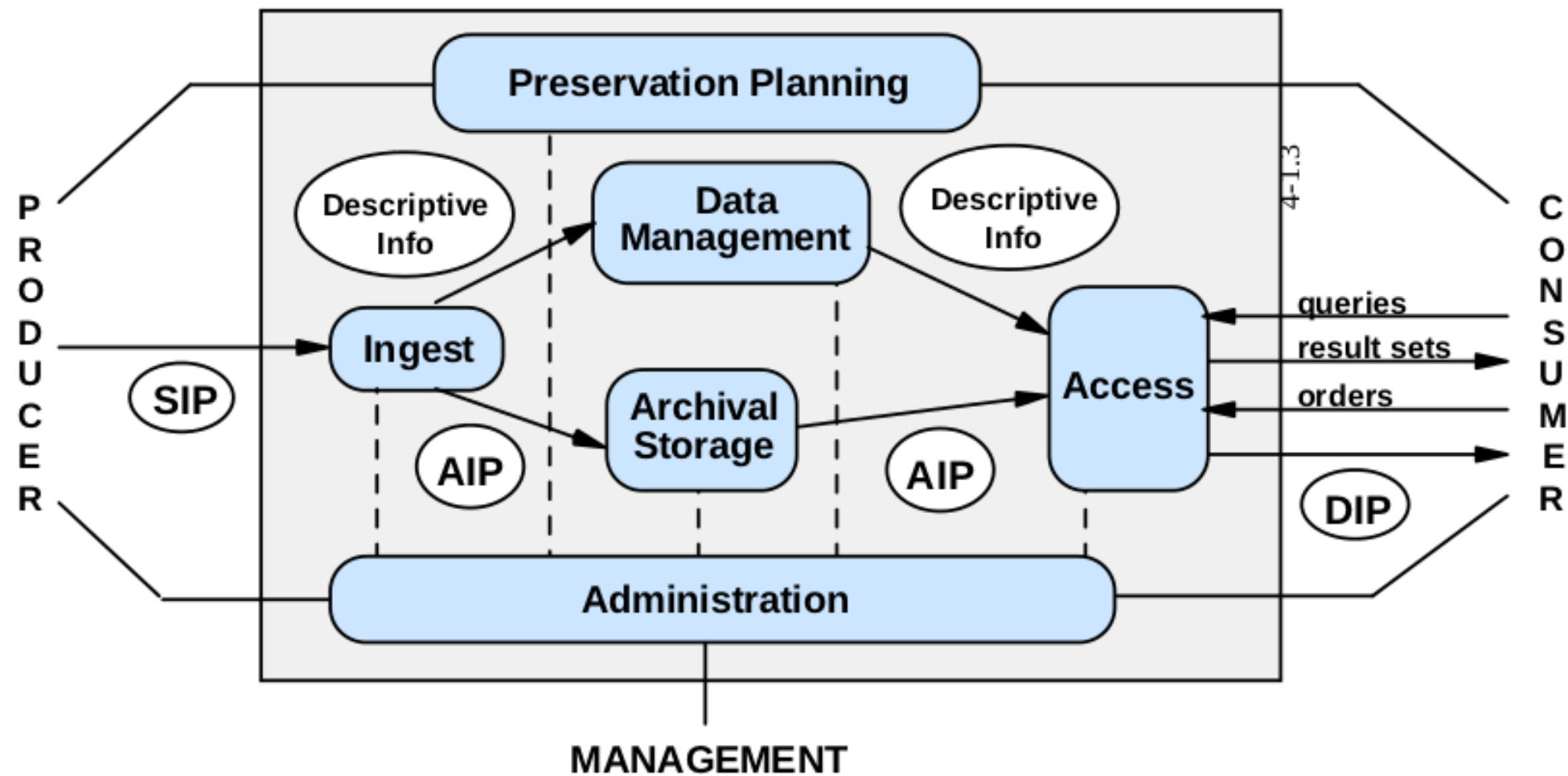


Figure 4-1: OAIS Functional Entities



# References and Resources

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- *Reference Model for an Open Archival Information System (OAIS)*. **CCSDS 650.0-B-1**, Blue Book, January 2002.  
<http://public.ccsds.org/publications/archive/650x0b1.pdf>
- Also known as **ISO14721:2003**.
- Draft revision under review: **CCSDS 650.0-P-1.1** (Pink Book) Issue 1.1 August 2009.





# Other Relevant Modules

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- Data identifiers and locators
- File naming conventions
- Using self-describing data formats
- Recording provenance and context
- Metadata for {discovery; access and use; archiving}